This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1, 5-9, 13-25 (canceled).

2. (Currently amended) A purified or isolated nucleic acid encoding a secreted soluble calcium channel subunit polypeptide that binds gabapentin said nucleic acid ~~comprising~~ consisting of a polynucleotide sequence encoding:

- from amino-acid 1 to between amino-acids 1027 and 1062 of SEQ ID NO:20, or
- from amino-acid 1 to between amino-acids 984 and 1019 of SEQ ID NO:22.

3. (Currently amended) A purified or isolated nucleic acid encoding a secreted soluble calcium channel subunit polypeptide that binds gabapentin wherein the sequence of said nucleic acid sequence encodes:

-a polypeptide consisting of from amino-acid 1 to between amino-acids 1047 and 1062 of SEQ ID NO:20, or

- from amino-acid 1 to between amino-acids 1004 and 1019 of SEQ ID NO:22.

4. (Currently amended) A purified or isolated nucleotide sequence encoding a secreted soluble calcium channel subunit polypeptide wherein said sequence ~~is~~ consists of the sequence of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:14, or SEQ ID NO:15.

10. (Previously presented) A recombinant vector comprising a nucleic acid according to claim 2.

11. (Previously presented) A recombinant host cell comprising a nucleic acid according to claim 2.

12. (Previously presented) A method for producing a secreted soluble calcium channel subunit polypeptide, said method comprises the steps of:

(a) inserting the nucleic acid according to claim 2 in an appropriate vector;

(b) culturing, in an appropriate culture medium, a host cell previously transformed or transfected with the recombinant vector of step (a);

(c) harvesting the culture medium thus obtained or lyse the host cell, for example by sonication or osmotic shock;

(d) separating or purifying, from said culture medium, or from the pellet of the resultant host cell lysate, the thus produced calcium channel subunit polypeptide of interest.

26. (New) The nucleic acid of claim 2, said nucleic acid consisting of a polynucleotide sequence encoding a polypeptide from amino-acid 1 to between amino-acids 1027 and 1062 of SEQ ID NO:20.

27. (New) The nucleic acid of claim 2, said nucleic acid consisting of a polynucleotide sequence encoding a polypeptide from amino-acid 1 to between amino-acids 984 and 1019 of SEQ ID NO:22.

28. (New) The nucleic acid of claim 3, wherein said nucleic acid sequence encodes a polypeptide consisting of from amino-acid 1 to between amino-acids 1047 and 1062 of SEQ ID NO:20.

29. (New) The nucleic acid of claim 3, wherein said nucleic acid sequence encodes a polypeptide consisting of from amino-acid 1 to between amino-acids 1004 and 1019 of SEQ ID NO:22.

30. (New) The nucleotide sequence of claim 4, wherein said sequence consists of the sequence of SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:3.

31. (New) The nucleotide sequence of claim 4, wherein said sequence consists of the sequence of SEQ ID NO:7, SEQ ID NO:8, or SEQ ID NO:9.

32. (New) The nucleotide sequence of claim 4, wherein said sequence consists of the sequence of SEQ ID NO:13, SEQ ID NO:14, or SEQ ID NO:15.

33. (New) A purified or isolated nucleic acid consisting of a nucleic acid that encodes a polypeptide tag fused to a calcium channel subunit polypeptide consisting of:

- from amino-acid 1 to between amino-acids 1027 and 1062 of SEQ ID NO:20, or
- from amino-acid 1 to between amino-acids 984 and 1019 of SEQ ID NO:22.

34. (New) The purified or isolated nucleic acid of claim 33, wherein said calcium channel subunit is a polypeptide from amino-acid 1 to between amino-acids 1027 and 1062 of SEQ ID NO:20.

35. (New) The purified or isolated nucleic acid of claim 33, wherein said calcium channel subunit is a polypeptide from amino-acid 1 to between amino-acids 984 and 1019 of SEQ ID NO:22.

36. (New) A purified or isolated nucleic acid consisting of a nucleic acid that encodes a polypeptide tag fused to a calcium channel subunit polypeptide consisting of from amino-acid 1 to between amino-acids 1047 and 1062 of SEQ ID NO:20, or

- from amino-acid 1 to between amino-acids 1004 and 1019 of SEQ ID NO:22.

37. (New) The purified or isolated nucleic acid of claim 36, wherein said calcium channel subunit polypeptide consists of from amino-acid 1 to between amino-acids 1047 and 1062 of SEQ ID NO:20.

38. (New) The purified or isolated nucleic acid of claim 36, wherein said calcium channel subunit polypeptide consists of from amino-acid 1 to between amino-acids 1004 and 1019 of SEQ ID NO:22.

39. (New) A purified or isolated nucleotide sequence consisting of a nucleic acid that encodes a polypeptide tag fused to a nucleic acid encoding a calcium channel subunit polypeptide selected from the group consisting of the nucleic acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:14, and SEQ ID NO:15.

40. (New) The nucleic acid of claim 38, wherein said nucleic acid encoding a calcium channel subunit polypeptide is selected from the group consisting of the sequence of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3.

41. (New) The nucleic acid of claim 38, wherein said nucleic acid encoding a calcium channel subunit polypeptide is selected from the group consisting of the sequence of SEQ ID NO:7, SEQ ID NO:8, and SEQ ID NO:9.

42. (New) The nucleic acid of claim 38, wherein said nucleic acid encoding a calcium channel subunit polypeptide is selected from the group consisting of the sequence of SEQ ID NO:13, SEQ ID NO:14, and SEQ ID NO:15.